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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,041	02/13/2002	Indu Bhuvan Chatterjee	3030.004USU	7417
7590 10/08/2003				
Paul D. Greeley, Esq. Ohlandt, Greeley, Ruggiero & Perle, L.L.P. 10th Floor One Landmark Square Stamford, CT 06901-2682			EXAMINER WALLS, DIONNE A.	
			ART UNIT 1731	PAPER NUMBER

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/076,041	CHATTERJEE, INDU BHUSAN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dionne A. Walls	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,7,8,12-39,46,48 and 52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 7-8, 12-39, 46, 48 and 52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 3, 7-8, 12-39, 46, 48 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has amended independent claim 1 to recite the second section having charcoal particle/mixture "selected from the group consisting of BS 25/44, BS 44/52, BS 52/60, BS 60/72, 72/85 and 85/100 having grain size ranging between 25 mesh to 100 mesh"; however, it is unclear what the difference is between the "grain size" recitation and "BS 25/44...." charcoal particle recitation. It appears as if both pieces of information are referring to the same thing, i.e. mesh size. Clarification is requested.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 7-8, 12-19, 31-39, 46, 48 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Art in view of Mentzel et al (US. Pat. No. 5,423,336).

In the instant specification page 14, lines 8-15, Applicant admits that typical charcoal filter cigarettes have a first conventional cellulose acetate fiber filter, acting as the mouthpiece, the length of which may vary according to convenience, e.g. 10-15 mm; a second conventional cellulose acetated fiber filter, acting as a barrier between a charcoal bed and a tobacco portion of the cigarette to prevent infiltration of charcoal into the tobacco, the length of which may be 2-4 mm; and a charcoal filter bed located between the two conventional cellulose fiber filters, the length of the activated charcoal bed varying depending on the amount of charcoal used, e.g. 4.5-5.5 mm per 100 mg; or 9-11 mm per 200 mg; or 13-16 mm per 300 mg, etc. While Applicant may not state that the charcoal used in the charcoal bed of the known charcoal filter cigarettes has the claimed charcoal particles and a grain size ranging between 25-100 mesh, Mentzel discloses a filter cigarette having a charcoal bed filter section sandwiched between cellulose acetated filter sections, the charcoal (activated carbon) particles having a screen mesh width in the range from 177-500 microns (corresponding to approximately 35-80 mesh – which is within the claimed range). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate charcoal particles having this mesh size into the charcoal bed of charcoal filter cigarettes since utilizing charcoal particles of this size, in charcoal filter cigarettes, is known as evidenced by the Mentzel et al reference.

Regarding claims 11-19, it would have been obvious to one having ordinary skill in the art at the time of the invention, in an effort to achieve optimal adsorption of noxious cigarette smoke constituents, to arrive at the claimed charcoal size and

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amount, after routine experimentation, since these charcoal grain sizes and amounts are envisioned by the applied prior art.

Regarding claim 31-39, 46 and 48, it would follow that the filter of Applicant's Admitted Art modified by Mentzel et al would demonstrate these claimed functions/attributes since structurally, the filter of the applied art is similar, if not substantially identical, to that which is claimed. Where the claimed and prior art product/apparatus is identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430,433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

#### ***Allowable Subject Matter***

3. Claims 20-30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

4. Applicant's arguments filed July 7<sup>th</sup>, 2003 have been fully considered but they are not persuasive.

- Applicant argues that the prior art described in the specification lacks any reference as to the amount and size of charcoal required in relation to the length of the cigarette. However, the Examiner believes that Applicant *has* admitted that the length of the charcoal bed may vary depending on the amount of charcoal used – which

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speaks to the amount of charcoal that one may choose to occupy the charcoal bed. Further, the Examiner has already admitted that the prior art described in the specification is silent with respect to the *size* of the charcoal; however, the Mentzel reference was presented to teach that it is known to use activated charcoal particles, in the range of 35-80 mesh, in a charcoal bed filter section sandwiched between two cellulose filter sections in a cigarette filter. The Examiner believes that one having ordinary skill in the art would have arrived at the claimed cigarette filter, based on the combined teachings, since the claimed amounts and/or size are suggested by the combined teachings.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne A. Walls whose telephone number is (703) 305-

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0933. The examiner can normally be reached on Mon-Fri, 7AM - 4:30PM (Every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

A handwritten signature in black ink, appearing to read "Dionne A. Walls", followed by a horizontal line extending to the right.

Dionne A. Walls  
October 6, 2003